

## ABSTRACT

A bounding route is calculated between two physical locations to determine a boundary value for which subsequent route calculations or portions thereof may be compared to. The bounding route may be calculated by selecting segments of roads that satisfy certain criteria.

- 5 These criteria may be based on weighting factors or parameters such as the "least distance traveled" or the "least travel time." The bounding route and the value may then provide any route calculation program with criteria used to determine whether a search at a particular location should continue. That is, if a search at a particular location has exceeded the criteria, or equivalently, the search has gone beyond the boundary, the search is stopped because it will most likely result in an un-optimal route. This process may then be an iterative one until an optimal search with a value less than the boundary value is found.